PTO-1390 (Rev. 12-2004)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/FO/US)

ATTORNEY'S DOCKET NUMBER XY-Optimum-USNP

	ICERNING A SUBMISSIC	U.S. APRILICATION NO (If known) see 37 CFR 1.5)								
	TIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED							
	T/US03/22906 22 July 2003 (22/07/2003) 22 July 2002 (22/07/2002)									
Sperm Cell Process System										
APPLICANT(S) FOR DO/EO/US John L. Schenk and Allison C. Lindsey										
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:										
1.	This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.									
2.	This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.									
3.	This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.									
4.	The US has been elected (Article 31).									
5.	A copy of the International Application as filed (35 U.S.C. 371(c)(2))									
	a. is attached hereto (required only if not communicated by the International Bureau).									
	b. has been communicated by the International Bureau.									
	c. is not required, as the application was filed in the United States Receiving Office (RO/US).									
6.	An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).									
	a. Lis attached hereto.									
7 🗹	b. Light has been previously submitted under 35 U.S.C. 154(d)(4).									
7.	Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))									
	a. U are attached hereto (required only if not communicated by the International Bureau).									
	b. — have been communicated by the International Bureau.									
	c. have not been made; however, the time limit for making such amendments has NOT expired. d. have not been made and will not be made.									
8. 🗆			rticle 19 (35 I I S.C. 371(c)(3))							
9.	An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).									
10.	An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).									
Items 11 to 20 below concern document(s) or information included:										
11.	An Information Disclosure Statement	under 37 CFR 1.97 and 1.98.								
12.	An assignment document for recording	ng. A separate cover sheet in compliance w	vith 37 CFR 3.28 and 3.31 is included.							
13. 🔲	A preliminary amendment.									
14.	An Application Data Sheet under 37 0	DFR 1.76.								
15.	A substitute specification.									
16. 🔽	A power of attorney and/or change of	address letter.								
17.	A computer-readable form of the sequence	uence listing in accordance with PCT Rule	13ter.2 and 37 CFR 1.821- 1.825.							
18.	A second copy of the published Interr	national Application under 35 U.S.C. 154(d)(4).							
19. 🔲		ge translation of the international applicatio	` '` '							
20. 🔽	firm letter Other items or information:	r or transmittal; Certificate of Express	Mailing for each document; return postcard							

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Page 1 of 2

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The following files are submitted: a) Basic national fee.	U.S. APPLICATION NO. (if known, see 37 CFR 1.5) INTERNATIONAL APPLICATION NO.						ATTORNEY'S DOCKET NUMBER				
21. The following feels are submitted? □ Applicant use Office use only □ a) Basic national fee \$100.00 □ b) Examination fee \$200.00 □ c) Search fee \$1000.00 □ disting or computer for periodication and drawings filled in paper over 100 sheets (excluding sequence) additional 50 sheets of paper or fraction thereof (round up to a whole number) 100 □ /50 □	9m/馬ククスクラ PCT/US03/22906						XY-Optimum-USNP				
b) Examination fee	1	ng fees are submitted:			Office use only						
c) Search fee	a) Basic na	ational fee	•••••	•••••		300.00	\$				
TOTAL OF ABOVE CALCULATIONS = \$1000.00 \$1,000.	b) Examination fee\$200.00						\$	<u> </u>			
Additional see for specification and drawings filed in pager over 100 sheets (excluding sequence listing or computer program fisting filed in an electronic medium). The fee is \$250 for each additional 50 sheets of pager or fraction thereof. Total Sheets	c) Search f	fee	•••••			\$500.00	\$	·			
Listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. Inc. additional 50 or fraction made additional 50 sheets of paper or fraction thereof (round up to a whole number) -100 =			\$ 1,000.00								
thereof (round up to a whole number) -100 =	listing or co	mputer program listing fil									
Surcharge of \$130.00 for furnishing the eath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)). CLAIMS NUMBER FILED NUMBER EXTRA RATE \$ Total claims 35 - 20 = 15	Total Sheets			RATE							
claimed priority date (37 CFR 1.492(e)). CLAIMS NUMBER FILED NUMBER EXTRA RATE \$ Total claims 35 - 20 = 15 x \$50.00 \$ 750.00 MULTIPLE DEPENDENT CLAIM(S) (if applicable) TOTAL OF ABOVE CALCULATIONS = \$ 2,640.00 Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by y. Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)). TOTAL NATIONAL FEE = \$ 2,640.00 Pee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property TOTAL FEES ENCLOSED = \$ 2,640.00 Amount to be refunded: Amount to be charged Amount to be charged Amount to be charged The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to be be included on this form. Provide credit card information on this form may become public. Credit card information should not be included on this form. Provide credit card unformation and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. SEND ALL CORRESPONDENCE TO: Nicole A. Ressue Santangelo Law Offices, P.C. SIGNATURE Nicole A. Ressue SIGNATURE Nicole A. Ressue SIGNATURE Nicole A. Ressue SIGNATURE Nicole A. Ressue PTO Reg. No. 48,665	- 100 =	/50 =			,	x \$250.00	\$ 0.00	-			
Total claims 35 - 20 = 15			ath or declara	ition later than 30 months fro	om the	earliest	\$ 130.00				
Independent claims	CLAIMS	NUMBER FIL	.ED	NUMBER EXTRA	- 1	RATE	\$				
MULTIPLE DEPENDENT CLAIM(S) (if applicable) TOTAL OF ABOVE CALCULATIONS = \$ 360.00 Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by %. SUBTOTAL = \$ 2,640.00 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)). TOTAL NATIONAL FEE = \$ 2,640.00 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property TOTAL FEES ENCLOSED = \$ 2,640.00 Amount to be refunded: Amount to be charged a. A check in the amount of \$	Total claims	3	5 - 20 =	15	х	\$50.00	\$ 750.00				
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Amount to be retunded. a. A check in the amount of \$			\$ 2,640.00								
a. A check in the amount of \$				\$							
b. Please charge my Deposit Account No in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No A duplicate copy of this sheet is enclosed. d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. SEND ALL CORRESPONDENCE TO: Nicole A. Ressue Santangelo Law Offices, P.C. 125 South Howes, Third Floor Fort Collins, CO 80521 MICOLE A. Ressue Nicole A. Ressue Nicole A. Ressue Nicole A. Ressue NAME PTO Reg. No. 48,665			be charged		\$						
b. Please charge my Deposit Account No in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No A duplicate copy of this sheet is enclosed. d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. SEND ALL CORRESPONDENCE TO: Nicole A. Ressue Santangelo Law Offices, P.C. 125 South Howes, Third Floor Fort Collins, CO 80521 MICOLE A. Ressue Nicole A. Ressue Nicole A. Ressue Nicole A. Ressue NAME PTO Reg. No. 48,665	a. A chec	ck in the amount of \$		to cover the above	ve fees	is enclosed.					
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SEND ALL CORRESPONDENCE TO: Nicole A. Ressue Santangelo Law Offices, P.C. 125 South Howes, Third Floor Fort Collins, CO 80521 Durus Ponce January 24, 2005 SIGNATURE Nicole A. Ressue NAME PTO Reg. No. 48,665	NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed										
Nicole A. Ressue Santangelo Law Offices, P.C. 125 South Howes, Third Floor Fort Collins, CO 80521 NAME PTO Reg. No. 48,665	,, , ,										
Santangelo Law Offices, P.C. 125 South Howes, Third Floor Fort Collins, CO 80521 Nicole A. Ressue NAME PTO Reg. No. 48,665	l '/ 🚗										
Fort Collins, CO 80521 Nicole A. Ressue NAME PTO Reg. No. 48,665	Santangelo L	_aw Offices, P.C.	SIGNATURE	. 14/100							
NAME PTO Reg. No. 48,665		•	icole A. Res	sue							
			NAME								
REGISTRATION NUMBER			TO Reg. No	. 48,665							
			REGISTRATIO	ON NUMBER							

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

John L. Schenk and Allison C. Lindsey

Application Number:

Filed:

Title:

Sperm Cell Process System

TC/A.U: Examiner:

International Application No: PCT/US03/22906, Filed 22 July 2003

Original US Application:

60/400,486, Filed 22 July 2002

Assignee:

XY, Inc.

Attorney Docket:

XY-Optimum-USNP

Customer No.

33549

LETTER OF TRANSMITTAL

Mail Stop PCT Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450.

Sir:

Enclosed for filing is a United States National Stage application under 35 U.S.C. §371 entitled "Sperm Cell Process System", including the following documents:

- 1. a Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) concerning a filing under 35 U.S.C. 371 (FORM PTO-1390 (REV 12-2004));
- 2. an Application Data Sheet;
- 3. Power of Attorney from XY, Inc.;
- 4. an Information Disclosure Statement -- copies non-US references cited (Foreign Patent/Publications and Other Documents) will be sent under separate cover;

- 5. this Letter of Transmittal along with a Credit Card Payment Form authorized in the amount of \$2,640.00 for National Phase filing fee; and
- 6. Express Mail Certificates for each document and a Postcard Receipt for return to the undersigned.

Please confirm receipt of the documents by applying your date stamp and serial number on the enclosed postcard and returning it to me.

Please address all future correspondence to: Santangelo Law Offices, P.C., 125 South Howes, Third Floor, Fort Collins, CO 80521.

I have this 24 day of January, 2005, either myself personally or through my direction of staff at this office, deposited all of the items in the above letter of transmittal with the United States Postal Service as Express Mail, postage prepaid, in an envelope addressed to: Mail Stop PCT, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Dated this 29 day of January, 2005.

Respectfully Submitted, SANTANGELO LAW OFFICES, P.C.

By: Nieve a. Penue

Nicole A. Ressue Attorney for Assignee PTO No, 48,665 125 South Howes, Third Floor Fort Collins, CO 80521 (970) 224-3100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

John L. Schenk and Allison C. Lindsey

Application Number:

Filed:

Title:

Sperm Cell Process System

TC/A.U: Examiner:

International Application No: PCT/US03/22906, Filed 22 July 2003

Original US Application:

60/400,486, Filed 22 July 2002

Assignee:

XY, Inc.

Attorney Docket:

XY-Optimum-USNP

Customer No.

33549

CERTIFICATE OF EXPRESS MAILING

- I, Cheryl A. Swanson, hereby certify to the truth of the following items:
- 1. I am an employee of Santangelo Law Offices, P.C., 125 South Howes, Third Floor, Fort Collins, Colorado 80521.
- 2. I have this day deposited the attached Letter of Transmittal along with a Credit Card Payment Form authorized in the amount of \$2,640.00 for National Phase filing fee and a return postcard with the United States Postal Service as "Express Mail" for mailing to: Mail Stop PCT, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Dated this 24 day of January, 2005.

Cheryla, Sevanson

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

John L. Schenk and Allison C. Lindsey

Application Number:

Filed:

Title:

Sperm Cell Process System

TC/A.U: Examiner:

International Application No: PCT/US03/22906, Filed 22 July 2003

Original US Application:

60/400,486, Filed 22 July 2002

Assignee:

XY, Inc.

Attorney Docket:

XY-Optimum-USNP

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Dated this <u>24</u> day of January, 2005.

<u>heryla.Swanson</u> Cheryl A. Swanson

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

John L. Schenk and Allison C. Lindsey

Application Number:

Filed:

Title:

Sperm Cell Process System

TC/A.U:

Examiner:

International Application No: PCT/US03/22906, Filed 22 July 2003

Original US Application:

60/400,486, Filed 22 July 2002

Assignee:

XY, Inc.

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Dated this 24 day of January, 2005.

Cheryl G. Swanson
Cheryl A. Swanson

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Applicants:

John L. Schenk and Allison C. Lindsey

Application Number:

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Dated this $2\sqrt{\frac{1}{2}}$ day of January, 2005.

Cheryl G. Swanson